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ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/684,706	GELVIN ET AL.
	Examiner	Art Unit
	Joseph E. Avellino	2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>09 June 2006</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-85</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-85</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☒ Other: ~~See Continuation Sheet~~

PTOL-326 (Rev. 1-04)   Office Action Summary   Part of Paper No./Mail Date 20060710

DETAILED ACTION

1.   Claims 1-85 are presented for examination. Claims 1, 63, 80, and 83-85 being

independent.

Specification

2.   The lengthy specification has not been checked to the extent necessary to

determine the presence of all possible minor errors. Applicant's cooperation is

requested in correcting any errors of which applicant may become aware in the

specification.

Double Patenting

3.   The nonstatutory double patenting rejection is based on a judicially created
doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the
unjustified or improper timewise extension of the "right to exclude" granted by a patent
and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11
F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225
USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA
1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,*
418 F.2d 528, 163 USPQ 644 (CCPA 1969).
        A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be
used to overcome an actual or provisional rejection based on a nonstatutory double
patenting ground provided the conflicting application or patent is shown to be commonly
owned with this application. See 37 CFR 1.130(b).
        Effective January 1, 1994, a registered attorney or agent of record may sign a
terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with
37 CFR 3.73(b).

4.   Claims 1-83 are rejected under the judicially created doctrine of obviousness-

type double patenting as being unpatentable over claims 1-41 of U.S. Patent No.

6,735,630 (Gelvin et al.). Although the conflicting claims are not identical, they are not

patentably distinct from each other because the recite limitations in the claims which do not render two patentably distinct inventions.

5.   For example, claim 1 of the patent recites all the limitations of claim 1 in the application except that "functions of the at least one node are remotely controllable using the at least one client computer" (claim 1) is recited in the application whereas the patent recites "remotely controlling at least one function of the plurality of network elements" (col. 77, lines 28-29) not specifically by the one client computer. However this would be an obviously inferred from the scope of the claim that the client computer remotely controls the node as shown in claim 14.

6.   Claims 2-83 recite limitations upon the invention which are deemed to be obvious variations of the invention and therefore are rejected for similar reasons as stated above.

7.   Furthermore, Claims 1-83 are provisionally rejected under the judicially created doctrine of double patenting over claims 1-51 of copending Application No. 09/684742. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows: both applications provide claims directed towards a sensor network coupling a plurality of network elements together which can be remotely controlled from a client computer, collecting data from

the environment, providing node resource information, and distributing storage and

processing of the collected data among the plurality of network elements. The current

application (i.e. '706) recites further limitations that the node resource information

includes node resource cost and message priority, however it is well known that he

node resource information disclosed in the '742 application can be broadly construed to

include "node resource cost and message priority" and therefore would inherently

include these limitations in these claims.

8.   Claims 2-83 recite limitations upon the invention which are deemed to be obvious

variations of the invention and therefore are rejected for similar reasons as stated above.

Claim Rejections - 35 USC § 102

9.   The text of those sections of Title 35, U.S. Code not included in this action can

be found in a prior Office action.

        Claims 1-3, 11-12, 14, 16, 18, 21, 28-29, 32, 33, 36, 42-44, 46-47, 50-53, 56-61,

and 80-83 are rejected under 35 U.S.C. 102(e) as being anticipated by Clare et al.

(USPN 6,414,955) (hereinafter Clare).

10.   Referring to claim 1, Clare discloses a sensor network comprising a plurality of

network elements including:

        at least one node (Figures 1-10) coupled among a monitored environment (col. 6,

lines 10-30) and at least one client computer (the Office takes the term "client computer"

to be broadly construed as "any node which is accessible by a user of the system") (col. 14, lines 12-34),

wherein functions of the at least one node are remotely controllable using the at least one client computer (col. 14-lines 12-34; col. 15, lines 13-16),

wherein the at least one node provides node information including node resource cost (i.e. network self-organization and routing) and message priority to the plurality of network elements (col. 15, lines 10-24 and 43-56),

wherein the data processing is distributed through the sensor network in response to the node information (col. 18, lines 35-64).

11.   Referring to claim 2, Clare discloses the at least one node includes sensing, processing, communications, and storage devices supporting a plurality of processing and protocol layers (col. 19, line 29 to col. 21, line 41).

12.   Referring to claim 3, Clare discloses the sensor network supports wireless communications (e.g. abstract).

13.   Referring to claim 11, Clare discloses at least one local user is coupled to the at least one node (col. 14, lines 12-34).

14.   Referring to claim 12, Clare discloses at least one redundant information pathway is established among the plurality of network elements (Figure 3).

15.   Referring to claim 14, Clare discloses the plurality of node types includes at least

one node of a first type (user node) and at least one node of a second type (sensor

node) (Figure 14; col. 14, lines 12-34);

16.   Referring to claim 16, Clare discloses the plurality of network elements

automatically organize in response to the node information, wherein the automatic

organizing comprises automatically controlling data transfer, processing and storage

within the network (col. 6, line 35 to col. 18, line 1).

17.   Referring to claim 18, Clare discloses the data processing is controlled using at

least one processing hierarchy, controlling communications among the plurality of

network elements (col. 15, lines 10-24).

18.   Referring to claim 21, Clare discloses the functions of the at least one node

include data acquisition (col. 15, lines 10-15).

19.   Referring to claim 28, Clare discloses controlling data processing and data

transmission in response to a decision probability of a detected event (col. 15, lines 10-

15).

20.   Referring to claim 29, Clare discloses the at least one node includes at least one

seismic sensor (col. 19, lines 30-43).

21.   Referring to claim 32, Clare discloses the plurality of network elements are self

assembling, wherein search and acquisition modes of the node search for participating

elements (e.g. abstract).

22.   Referring to claim 33, Clare discloses the plurality of network elements are self-

assembled into a multi-cluster network (i.e. defining neighbor nodes such as

communicating neighbors and interfering neighbors) (col. 6, lines 35-62).

23.   Referring to claim 36, Clare discloses synchronism is established among the

plurality of network elements using the assembly packets

24.   Referring to claim 42, Clare discloses data is collected by the node and at least

one operation is performed on the data including energy detection (col. 20, lines 15-56).

25.   Referring to claim 43, wherein the routing, processing, storing and fusing are

performed in response to at least one result of the energy detection (col. 20, lines 15-

56).

26. Referring to claim 44, Clare discloses the routing comprises selecting a data type for routing, selecting one of the plurality of elements to route the data, selecting a route, and routing the data (i.e. a sensor device transmitting data to a user node for display) (col. 18, lines 35-65).

27. Referring to claim 46, Clare discloses the processing comprises selecting at least one data type for processing, selecting at least one processing type, selecting at least one of the plurality of network elements to perform the selected at least one processing type, and transferring the selected at least one data type to the selected at least one of the plurality of network elements using at least one route through the sensor network (col. 18, lines 35-64).

28. Referring to claim 47, Clare discloses the selection of at least one processing type comprises determining at least one probability (i.e. decision-making) associated with a detected event (monitored environment settings) and selecting at least one processing type in response to the at least one probability (i.e. if the decision is true, do something different than if the decision is false) (Figure 15; col. 18, lines 35-64).

29. Referring to claim 52, Clare discloses the at least one node includes a bi-static sensor and a generator for producing at least one energy beam that is radiated from the plurality of nodes, wherein the at least one energy beam comprises a combined probe beam and a signal code for beam intensity control and propagation management,

wherein the at least one energy beam is modulated in time to provide an identifying

code corresponding ot a source node, wherein the at least one energy beam is acoustic

(col. 22, lines 47 to 67).

30.   Referring to claim 53, Clare discloses determining a position of the at least one

node (col. 22, lines 35-67).

31.   Referring to claim 56, Clare discloses using a GPS device providing location and

time information (col. 7, lines 58-67).

32.   Referring to claim 57, Clare discloses the node has a communication modem (i.e.

a wireless antenna) (Figure 14 and related portions of the disclosure).

33.   Referring to claim 58, Clare discloses communications uses multihop

communications (Figures 1-10).

34.   Referring to claim 59, Clare discloses the monitored environment is an outdoor

area (col. 7, lines 58-67).

35.   Referring to claim 60, Clare discloses supporting short range and long range

communications (Figure 1).

36.   Referring to claim 61, Clare discloses the node is contained in a sealed and

waterproof system (Figure 14, and related portions of the disclosure).

37.   Claims 50, 51, 80-83 are rejected for similar reasons as stated above.

Claim Rejections - 35 USC § 103

38.   The text of those sections of Title 35, U.S. Code not included in this action can

be found in a prior Office action.

Claims 30, 45 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Clare in view of Official Notice.

39.   Referring to claim 30, Clare discloses the invention substantively as described in

claim 29. Clare does not specifically state the one sensor is external to the one node,

however "Official Notice" is taken that both the concept and advantages of providing for

an external sensor to the node is well known and expected in the art. It would have

been obvious to one of ordinary skill in the art to include an external sensor to provide

easy accessibility to the sensor by a repairman, facilitating the ease of future upgrades

or replacements.

40.   Referring to claim 45, Clare discloses the invention substantively as described in

claim 44. Clare does not specifically disclose transmitting data in the message as a

code in a codebook. "Official Notice" is taken that both the concepts and advantages of providing for transmitting codes in messages is well known and expected in the art. It would have been obvious to one of ordinary skill in the art to include transmitting codes from a codebook in messages to the system of Clare to conserve bandwidth in a low-power system, thereby conserving available power for the network.

41.   Referring to claim 55, Clare discloses the invention substantively as described in claim 1. Clare does not specifically state protecting communications among the elements using a public key security protocol. "Official Notice" is taken that both the concept and advantages of providing for public key encryption in wireless devices is well known and expected in the art. It would have been obvious to one of ordinary skill in the art to include public key encryption to the system of Clare to provide a basic level of security, thereby reducing the occurrences of eavesdropping by hackers and malcontents.

Claims 4-10, 13, 17, 19, 25, 38-41, 48-49, 62-79, and 84-85 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clare in view of Myer et al. (USPN 6,615,088) (hereinafter Myer).

42.   Referring to claim 4, Clare discloses the invention substantively as described in claim 1. Clare does not specifically disclose the network includes a gateway, a server, and at least one hybrid wired and wireless network. Myer discloses another sensor

network which includes at least one gateway 12, at least one server 25, and at least one

hybrid wireless and wired network (Figure 1; col. 2, lines 52-67). It would be obvious to

a person of ordinary skill in the art at the time the invention was made to combine the

teaching of Myer with Clare to facilitate device configuration in a network as supported

by Myer (col. 1, lines 26-30).

43.   Referring to claims 5 and 6, Clare discloses the invention substantively as

described in claim 1. Clare does not disclose the at least one gateway performs

management of communications with at least one remote user. Myer discloses the at

least one gateway node (control network portal 12) performs management of

communications with at least one remote user (col. 4, lines 28-50). It would be obvious

to a person of ordinary skill in the art at the time the invention was made to combine the

teaching of Myer with Clare to facilitate device configuration in a network as supported

by Myer (col. 1, lines 26-30).

44.   Referring to claim 8, Clare discloses the invention substantively as described in

claim 1. Clare does not specifically disclose the network is the Internet. Myer discloses

the network is the Internet 22, (Figure 1). It would be obvious to a person of ordinary

skill in the art at the time the invention was made to combine the teaching of Myer with

Clare to facilitate device configuration in a network as supported by Myer (col. 1, lines

26-30).

45.   Referring to claim 9, Clare discloses the invention substantively as described in

claim 1. Clare does not disclose providing remote accessibility using WWW-based tools

to data, code, management, and security functions. Myer discloses providing remote

accessibility using WWW-based tools to data, code, management, and security

functions (Figure 2). It would be obvious to a person of ordinary skill in the art at the

time the invention was made to combine the teaching of Myer with Clare to facilitate

device configuration in a network as supported by Myer (col. 1, lines 26-30).

46.   Referring to claim 10, Clare discloses the invention substantively as described in

claim 1. Clare does not specifically disclose that the gateway is coupled to the network

elements, wherein the elements include repeaters and interrogators. Meyer discloses

coupling a gateway with a plurality of network elements (Figure 1) and it is well known

that repeaters and interrogators exist in the network (i.e. repeaters forward signals over

long distances >100m which is necessary for the Ethernet protocol). It would be

obvious to a person of ordinary skill in the art at the time the invention was made to

combine the teaching of Myer with Clare to facilitate device configuration in a network

as supported by Myer (col. 1, lines 26-30).

47.   Referring to claim 13, Clare discloses the invention substantively as described in

claim 1. Clare does not disclose supporting a plurality of levels of synchronization

among different subsets of the plurality of network elements. Myer discloses that the

master controller 36 can periodically poll each appliance 37-39 in order to obtain the

status of the device (col. 3, lines 15-22). Furthermore, it is well known that polling

periods can be user defined to utilize slow status-changing devices (light switches are

slow to change status compared to acoustic sensors in a room, thereby requiring a

different level of synchronization for the light switch than for the acoustic sensor). By

this rationale it would have been obvious to one of ordinary skill in the art to modify the

teachings of Clare and Myer to provide for multiple levels of synchronization to reduce

wasted bandwidth on status updates for devices which have a slow status change

interval.

48.   Referring to claims 17 and 84, Clare discloses the invention substantively as

described in claim 1. Clare does not disclose supporting a plurality of levels of

synchronization among different subsets of the plurality of network elements. Myer

discloses that the master controller 36 can periodically poll each appliance 37-39 in

order to obtain the status of the device (col. 3, lines 15-22). Furthermore, it is well

known that polling periods can be user defined to utilize slow status-changing devices

(light switches are slow to change status compared to acoustic sensors in a room,

thereby requiring a different level of synchronization for the light switch than for the

acoustic sensor). By this rationale it would have been obvious to one of ordinary skill in

the art to modify the teachings of Clare and Myer to provide for multiple levels of

synchronization to reduce wasted bandwidth on status updates for devices which have

a slow status change interval.

49.   Referring to claims 19, 48, 49, and 85, Clare discloses the invention

substantively as described in claim 18. Clare does not specifically disclose aggregating

data processed in a plurality of nodes for further processing by other nodes. Myer

discloses polling devices by the master controller 36 in order to monitor the devices

status, which can then be sent to a user interface device for display (the device status

reports collected by the master controller 36 must inherently be processed by the client

GUI device, or other node, in order for it to be displayable to the user) (col. 3, lines 15-

25). It would be obvious to a person of ordinary skill in the art at the time the invention

was made to combine the teaching of Myer with Clare to facilitate device configuration

in a network as supported by Myer (col. 1, lines 26-30).

50.   Referring to claim 38, Clare discloses the invention substantively as described in

claim 1. Clare does not disclose comprising at least one database separate from the

plurality of network elements. Myer discloses comprising at least one database

separate from the plurality of network elements (col. 3, lines 45-50). It would be obvious

to a person of ordinary skill in the art at the time the invention was made to combine the

teaching of Myer with Clare to facilitate device configuration in a network as supported

by Myer (col. 1, lines 26-30).

51.   Referring to claim 39, Clare in view of Myer disclose the invention substantively

as described in claim 38. Clare in view of Myer do not specifically disclose that

cooperative sensing uses information in the database to provide non-local event

correlation. However, it is well known that multiple sensors are used to monitor multiple

characteristics of a system (two sensors in a CPU measuring voltage and thermal

temperature to ensure that a chip is operating efficiently). "Official Notice" is taken that

both the concepts and advantages of providing for cooperative sensing is well known

and expected in the art. It would have been obvious to one of ordinary skill in the art to

include cooperative sensing to the system of Clare and Myer to allow numerous

physical characteristics to be monitored simultaneously to provide a more detailed

description of the monitored area.

52.   Referring to claim 40, Clare in view of Myer discloses the invention substantively

as described in claim 29. Claire further discloses data-driven alerting methods that

recognize conditions on user-defined data relationships (i.e. user profiles) including

coincidence in signal arrival, node power status, and network communication status

(col. 18, lines 35-64).

53.   Referring to claim 41, Clare in view of Myer discloses the invention substantively

as described in claim 29. Although neither Clare nor Myer specifically state

implementing the database in a small footprint database and in a SQL database

systems at a level of at least one server, it is well known that these features exist and

would have been obvious to one of ordinary skill in the art to incorporate a small

footprint database to the invention of Clare and Myer to provide the productivity and

reliability that a SQL database allows, while still keeping information search and

retrieval times to a minimum.

54.   Claims 7, 25, and 62-79 are rejected for similar reasons as stated above.

Furthermore Claim 62 recites limitations which are well known and expected in the art

(the concept of reusing code is the basis for object-oriented programming, that code

may be imported and reused in different situations) and would be considered obvious to

one of ordinary skill in the art. Claims 63-79 recite limitations previously discussed and

are further discussed in view of the other art below.

Claims 15 and 54 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Clare in view of Davis et al. (USPN 5,742,829) (hereinafter Davis).

55.   Clare discloses the invention substantively as described in claim 1. Clare does

not disclose distributing code and data anticipated for future use through the sensor

network using low priority messages, wherein the code and the data are downloadable

from a storage device. Davis discloses a network wherein distributing code and data

anticipated for future use through the sensor network using low priority messages (i.e. in

the background), wherein the code and the data are downloadable from a storage

device (it is inherent that the code/data are downloaded from a storage device) (col. 6,

lines 27-65). It would be obvious to a person of ordinary skill in the art at the time the

invention was made to combine the teaching of Davis with Clare to facilitate the

installation of software on heterogeneous clients on the distributed network, thereby

reducing installation costs and reducing downtime as supported by Davis (col. 2, lines

10-15).

Claims 19, 20, and 31 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Clare in view of Makansi et al. (US 2002/0154631) (hereinafter

Makansi).

56.   Clare discloses the invention substantively as described in claim 1. Furthermore

it is an inherent feature of Clare to aggregate the data to be transmitted to a user to

conserve energy by reducing the amount of packets and saving bandwidth. Clare does

not disclose the message packets include decoy packets wherein information to be

transferred is impressed on random message packets to provide communication

privacy. Makansi discloses message packets include decoy packets wherein

information to be transferred is impressed on random message packets to provide

communication privacy on a network (e.g. abstract). It would be obvious to a person of

ordinary skill in the art at the time the invention was made to combine the teaching of

Makansi with Clare to provide messages to be transmitted in ways such that potential

adversaries are given access to a relatively little amount of information as supported by

Makansi (p. 1 ¶ 8).

Claims 9, 22-24, 27, and 37 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Clare in view of Humpleman et al. (USPN 6,546,419) (hereinafter

Humpleman).

57.   Referring to claim 9, Clare discloses the invention substantively as described in

claim 1. Clare does not disclose having the node of the first type containing a

preprocessor with a state machine, an API and at least one sensor. Humpleman

discloses a home sensor network wherein a first node 14 of a first type (Device A)

contains a preprocessor with a state machine (it is inherent that a standard

microprocessor emulates the effects of a state machine during its pipelining of

instructions, fetch, decode, execute, store, etc.), an API (INTERFACE-A.xml), and at

least one sensor (h/w) (e.g. abstract; Figure 16; col. 22, lines 52-58). It would be

obvious to a person of ordinary skill in the art at the time the invention was made to

combine the teaching of Clare with Humpleman to be able to control a plurality of

diverse devices having different capabilities to communicate in order to accomplish

tasks or to provide a service as supported by Humpleman (col. 2, lines 38-45).

58.   Referring to claim 22, Clare discloses the invention substantively as described in

claim 1. Clare does not disclose having the node of the second type including at lest

one preprocessor coupled to at lest one processor and a plurality of API's, wherein the

plurality of API's are coupled to control at lest one device. Humpleman discloses a

home sensor network wherein the node 14 of the second type (device B), contains at

least one preprocessor coupled to at least one processor (it is well known that a server

computer has multiple microprocessors embedded within the server which are either

directly or indirectly coupled together), a plurality of API's (INTERFACE-A.XML and

INTERFACE-B.XML), wherein the plurality of API's are coupled to control at least one

sensor device (i.e. smoke detectors) (e.g. abstract; Figure 16; col. 22, lines 52-58). It

would be obvious to a person of ordinary skill in the art at the time the invention was

made to combine the teaching of Clare with Humpleman to be able to control a plurality

of diverse devices having different capabilities to communicate in order to accomplish

tasks or to provide a service as supported by Humpleman (col. 2, lines 38-45).

59.   Referring to claim 23, Clare discloses the invention substantively as described in

claim 1. Clare does not disclose layering the plurality of API's. Humpleman discloses

layering the plurality of API's in the device (Figure 19, reference characters 72-92). It

would be obvious to a person of ordinary skill in the art at the time the invention was

made to combine the teaching of Clare with Humpleman to be able to control a plurality

of diverse devices having different capabilities to communicate in order to accomplish

tasks or to provide a service as supported by Humpleman (col. 2, lines 38-45).

60.   Referring to claim 26, Clare discloses the preprocessor (ADC) performs data

acquisition, and the processor (DSP) performs signal identification (col. 18, lines 35-64).

61.   Referring to claim 24, Clare discloses the invention substantively as described in

claim 1. Clare further discloses enabling distributed resource management by providing

network resource information and message priority information to the plurality of

network elements (col. 14, lines 12-34; col. 15, lines 10-25). Clare does not specifically

disclose enabling distributed resource management through the plurality of API's.

However Humpleman discloses using the API's to enable distributed resource

management (i.e. enabling services to be used via the API's) (Figures 15-19 and

pertinent portions of the disclosure). It would be obvious to a person of ordinary skill in

the art at the time the invention was made to combine the teaching of Clare with

Humpleman to be able to control a plurality of diverse devices having different

capabilities to communicate in order to accomplish tasks or to provide a service as

supported by Humpleman (col. 2, lines 38-45).

62.   Referring to claim 27, Clare discloses the processor performs reconfiguration and

signal identification (e.g. abstract).

63.   Referring to claim 37, Clare discloses the invention substantively as described in

claim 1. Clare does not disclose managing the plurality of network elements as a

distributed database using a distributed resource management protocol, wherein the

plurality of network elements are reused among different applications, wherein the

network elements are used in multiple classes of applications. Humpleman discloses

managing the plurality of network elements as a distributed database using a distributed

resource management protocol, wherein the plurality of network elements are reused

among different applications, wherein the network elements are used in multiple classes

of applications (the servers and clients can reside on the same node and execute both

client and server applications) (col. 6, lines 18-34). It would be obvious to a person of

ordinary skill in the art at the time the invention was made to combine the teaching of

Clare with Humpleman to be able to control a plurality of diverse devices having

different capabilities to communicate in order to accomplish tasks or to provide a service

as supported by Humpleman (col. 2, lines 38-45).

Response to Amendment

64.   The Office has considered the amendment to claim 36. The rejection under 35

USC 112 has been withdrawn

Response to Arguments

65.   Applicant's arguments filed June 9, 2006 have been fully considered but they are

not persuasive.

66.   In the remarks, Applicant argues, in substance, that (1) Gelvin does not disclose

distributing storage and processing of the collected data, (2) Clare does not disclose

distributing storage and processing of the collected data, and (3) Applicant reserves the

later right to challenge the Examiner's taking of Official Notice.

67.   As to point (1) Applicant should be advised that in order to process information,

as is done in Gelvin, the information must first be stored, such that the processors are

able to access the data. This therefore meets the limitation of "distributing storage and

processing of the collected data". By this rationale, the rejection is maintained.

68.   As to point (2) Applicant is incorrect. Clare discloses the data is distributed with

a user node on the network (col. 16, lines 5-16) and that a user may tap the network for

information without disturbing the topology. This clearly shows that a user node may

receive and store data from the wireless sensor topology, which meets the limitation of

distributing storage and processing of the collected data among the plurality of

elements. By this rationale, the rejection is maintained.

69.   As to point (3) Applicant is incorrect. Applicant has failed to seasonably

challenge the Examiner's assertions of well known subject matter in the previous Office

action(s) pursuant to the requirements set forth under MPEP §2144.03. **A "seasonable**

challenge" is an explicit demand for evidence set forth by Applicant in the next

response. Accordingly, the claim limitations the Examiner considered as "well known"

in the first Office action are now established as admitted prior art of record for the

course of the prosecution. See In re Chevenard, 139 F.2d 71, 60 USPQ 239 (CCPA

1943).

Conclusion

70.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

71.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Joseph E. Avellino whose telephone number is (571)

272-3905. The examiner can normally be reached on Monday-Friday 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David A. Wiley can be reached on (571) 272-3923. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

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JEA
July 10, 2006

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